

ABSTRACT OF THE DISCLOSURE

A selectively protected electrical system includes or operates with a power source, a load, a power driver circuit for controllably transferring power from the power source to the load, the power driver circuit being encapsulated in a potting material, and a controller for enabling and disabling the power driver circuit, the controller being un-encapsulated by the potting material. If a contaminant induced electrical fault occurs in the selectively protected electrical system, the electrical fault is more likely to occur in the un-encapsulated controller, such that the selectively protected electrical system is disabled. The contaminant is inhibited from contacting and inducing an electrical fault in the power driver circuit, thus providing for a controlled failure of the selectively protected electrical system.